



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

9/8/2016

Certified Mail

Drew Parker
DP&L Tait Generating Station
2101 Arbor Boulevard
Moraine, OH 45439-1762

Facility ID: 0857043333
Permit Number: P0118126
County: Montgomery

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio Environmental Protection Agency (EPA) Preliminary Proposed Title V permit that was issued in draft form on 6/1/2016. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments. If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

A handwritten signature in black ink that reads "Michael E. Hopkins".

Michael E. Hopkins, P.E
Assistant Chief Permitting Section, DAPC

Cc: Regional Air Pollution Control Agency



Response to Comments

Facility ID:	0857043333
Facility Name:	DP&L Tait Generating Station
Facility Description:	Electric Services.
Facility Address:	2101 Arbor Boulevard Moraine, OH 45439-1762 Montgomery County
Permit:	P0118126, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Dayton Daily News on 06/03/2016. The comment period ended on 07/03/2016.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: Fuel Oil Restriction from April 1 through September 30

- a. Comment: *We continue to assert that there no longer exists a regulatory or environmental reason for prohibiting the use of ULSD oil any time of year. We anticipate some use of ULSD in the winter-time. We anticipate very little use in the summertime, other than reliability testing. Please delete this prohibition.*
- b. Comment: We suggest shorter language as follows, "The permittee shall only use ultra-low sulfur diesel fuel oil in this emissions unit from April 1 through September 30 of each year." This is a simplification that may not require changes to other sections of the permit. Annual sulfur ton limits, etc. are retained.

Response: The initial permit to install (PTI) 08-02507 for the installation of the combustion turbines at DP&L Tait Generating Station included the requirements of Prevention of Significant Deterioration (PSD) new source review for NOx, CO, SO2 and PM. Under the PSD rules, DP&L is subject to the Best Available Control Technology (BACT) requirements for NOx. At the time of installation BACT was determined to be dry-low NOx burners when combusting natural gas. DP&L agreed to install dry-low NOx burners on one of the turbines, use fuel oil as backup fuel and restrict the fuel oil usage during ozone season (April 1 through September 30) on all three of the combustion turbines. DP&L proposed that the fuel usage restrictions that were included in

PTI 08-02507 would force the development and installation of new and innovative emissions control technology for these types of sources while ensuring that the quality of the ambient air was protected and the attainment status of the area was maintained in attainment for ozone. PTI 08-02507 was modified several times and the requirement to restrict the fuel oil usage during ozone season was carried through the PTI modifications and is in the current PTI (08-04888) because it was due to the BACT determination. The restriction on fuel oil usage during ozone season will be retained in this permit. The permit does allow fuel oil usage during ozone season for one-half hour of each month for reliability testing and under emergency conditions when natural gas supplies are not available.

Additionally, a comment was included requesting a term be added to the permit to required the use ultra-low sulfur diesel fuel oil in this emissions unit from April 1 through September 30 of each year to retain the annual SO₂ emissions limit. This request does not address the original intent of the fuel oil restriction, which was to limit the NO_x emissions not SO₂.

2. Topic: Low Mass Emission (LME) monitoring

- a. Comment: *Page 19 of 74 correctly indicates that we currently use the LME approach to monitor NO_x. We request that you make it clear to the permit reader that DP&L can return to the use of conventional CEMS, without modifying this permit.*

Response: The table has been updated.

- b. Comment: *Pages 29 and 60 of 74 should make a clear reference to Low Mass Emission (LME) monitoring. This can be done by adding at the appropriate point "or procedures specified in 40 CFR 75.19(c)(3)(ii)"*

Response: A clear reference to Low Mass Emission (LME) monitoring was added accordingly.

3. Topic: Typos and misc. revisions

- a. Comment: *Pages 31 and 63 of 74 – in (14)b. please delete the phrase, "(units using the long term fuel flow methodology report operating time to be 1)." We don't view "1" as an accurate value.*

Response: The reference sections were revised to reflect the requirement of 40 CFR Part 75.57.

- b. Comment: *Pages 31 and 63 of 74 – in (14)d. please delete the word "average." This word is appropriate for CEMS, but does not fit the LME approach*

Response: The revisions were made.

- c. Comment: *Pages 31 and 63 of 74 – (14)k can be deleted. We are not evaluating three approaches. We currently use LME and long term fuel flow*

Response: In accordance with 40 CFR 75.19(c)(3), the facility is required to identify the method of determining hourly heat input. Therefore the language will be retained.

- d. Comment: *Page 44 of 74 – (2)b (middle of page) has a typo. The second line of*



"Requirement" should read Table 2b #2 instead of Table 2b #1

Response: The revision was made.

- e. *Comment: the third row of "Requirement" has a citation of 40 CFR 63.6612, which we believe only applies at major HAPS sites. Tait is an area source for HAPS. This citation should be deleted.*

Response: 40 CFR 63.6612 applies to major HAP sites and existing stationary RICE located at an area source of HAP emissions. The citation will be retained.



PRELIMINARY PROPOSED

Division of Air Pollution Control Title V Permit for DP&L Tait Generating Station

Facility ID:	0857043333
Permit Number:	P0118126
Permit Type:	Renewal
Issued:	9/8/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Title V Permit
for
DP&L Tait Generating Station

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Preliminary Proposed Title V Permit

DP&L Tait Generating Station

Permit Number: P0118126

Facility ID: 0857043333

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0857043333
Facility Description: Electric Services.
Application Number(s): A0051888
Permit Number: P0118126
Permit Description: Title V renewal permit for three natural gas-fired simple cycle, gas-combustion-turbine generators and four large bore no. 2 fuel oil-fired stationary internal combustion engines.
Permit Type: Renewal
Issue Date: 9/8/2016
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0093121

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

DP&L Tait Generating Station
2101 Arbor Boulevard
Moraine, OH 45439-1762

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Regional Air Pollution Control Agency. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director



Preliminary Proposed Title V Permit
DP&L Tait Generating Station
Permit Number: P0118126
Facility ID: 0857043333
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the



probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Regional Air Pollution Control Agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Regional Air Pollution Control Agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally



enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Regional Air Pollution Control Agency unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.



- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
 - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Regional Air Pollution Control Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Regional Air Pollution Control Agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms



and conditions with which there has been continuous compliance throughout the year are not separately identified.

- b. The permittee's current compliance status.
- c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
- d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
- e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Regional Air Pollution Control Agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Regional Air Pollution Control Agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Regional Air Pollution Control Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine



whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Regional Air Pollution Control Agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Regional Air Pollution Control Agency must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



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DP&L Tait Generating Station

Permit Number: P0118126

Facility ID: 0857043333

Effective Date: To be entered upon final issuance

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Regional Air Pollution Control Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



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B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

- a) None.

2. The permittee shall ensure that any CAIR NO_x, SO₂, or NO_x ozone season units complies with the requirements of OAC chapter 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements as outlined in the permit application submitted as required by OAC rules 3745-109-03, 3745-109-10 and 3745-109-16 for the affected emissions units.

The permittee shall also comply with any subsequent federally mandated programs that may replace the CAIR program affecting electric generating facilities.

Note: Ohio EPA DAPC has completed proposed rule amendments for OAC chapter 3745-14, specifically, OAC rule 3745-14-01 and OAC rule 3745-14-06, which facilitated the transition of the affected units from OAC chapter 3745-14 into the federal Clean Air Interstate Rule (CAIR) program which began with the 2009 control periods. This began the process of “sunsetting” the parts of OAC chapter 3745-14 which were no longer needed as a result of Ohio’s CAIR rules (OAC chapter 3745-109).

[Authority for term: OAC rules 3745-109 and 3745-77-07(A)(5)]

3. Transportation Rule (TR) Trading Program Requirements

- a) The permittee shall comply with all applicable Cross-State Air Pollution Rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA – DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA – DDDDD.
- b) The TR subject units, and the unit-specific monitoring provisions at this source, are identified in the following table. These units are subject to the requirements for the TR NO_x Annual Trading Program and TR NO_x Ozone Season Trading Program.



Unit ID: P005, P006 and P007 - Natural gas and fuel oil-fired combustion turbines with water injection controls					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO ₂	X				
NO _x	X			X	
Heat input				X	

- c) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NO_x Annual Trading Program), and 97.530 through 97.535 (TR NO_x Ozone Season Trading Program), as applicable]. The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.
- d) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <http://www.epa.gov/airmarkets/emissions/monitoringplans.html>.
- e) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), and 97.535 (TR NO_x Ozone Season Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>
- f) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NO_x Annual Trading Program), and 97.530 through 97.534 (TR NO_x Ozone Season Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NO_x Annual Trading Program), and 97.535 (TR NO_x Ozone Season Trading Program). The Administrator's response approving or disapproving any petition for an



alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at <http://www.epa.gov/airmarkets/emissions/petitions.html>.

- g) The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NOX Annual Trading Program), 97.530 through 97.534 (TR NOX Ozone Season Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

h) TR NOx Annual Trading Program requirements

Designated representative requirements	97.406(a), 97.413-97.418
Emissions monitoring, reporting and recordkeeping requirements	97.406(b), 97.430-97.435
NOx emissions requirements	97.406(c)
Title V permit revision requirements	97.406(d)
Additional recordkeeping and reporting requirements	97.406(e)
Liability	97.406(f)
Effect on other authorities	97.406(g)

i) TR NOx Ozone Season Trading Program requirements

Designated representative requirements	97.506(a), 97.513-97.518
Emissions monitoring, reporting and recordkeeping requirements	97.506(b), 97.530-97.535
NOx emissions requirements	97.506(c)
Title V permit revision requirements	97.506(d)
Additional recordkeeping and reporting requirements	97.506(e)
Liability	97.506(f)
Effect on other authorities	97.506(g)

[Authority for term: 40 CFR Part 97]



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C. Emissions Unit Terms and Conditions



1. P007, Tait CT-3

Operations, Property and/or Equipment Description:

80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection and dry low NOx (DLN) combustor controls, CT-3

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04888	<p>Sulfur dioxide (SO₂) emissions from this emissions unit shall not exceed 0.0006 lb/mmBtu during natural gas combustion, 0.055 lb/mmBtu during number two fuel oil combustion, and 30.86 tons per year (TPY).</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.0 lbs/hr and 15.0 TPY.</p> <p>Particulate/PM₁₀ emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion; 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion; and 15.5 TPY.</p> <p>Nitrogen oxides (NO_x) emissions from this emissions unit shall not exceed 15 ppmvd at 15% oxygen at full load and 62 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion; and 110 tons per rolling, 12-month period.</p>



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions from this emissions unit shall not exceed 301 lbs/hr at all operating loads, excluding start-up and shutdown periods when firing natural gas; 413 lbs/hr during start-up and shutdown periods when firing natural gas; and 800 lbs/hr when firing number two fuel oil.</p> <p>CO emissions from this emissions unit shall not exceed 160.8 tons per rolling 12-month period, including periods of start-up and shutdown, with the total combined CO emissions from emissions units P005, P006 and P007 not to exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.</p> <p>Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.</p> <p>See b)(2)d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, 3745-21-08(B) and 3745-31-05(D) and 40 CFR Part 52, Section 52.21.</p>
b.	40 CFR Part 75	See Section A.5.
c.	OAC rules 3745-31-10 through 3745-31-20	The SO ₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.
d.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) 40 CFR Part 60 Subpart GG OAC rule 3745-16-02	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Section 52.21 and OAC rules 3745-31-05(A)(3), and 3745-31-10 through 3745-31-20.
e.	OAC rule 3745-14	See Section B.2.
f.	OAC rule 3745-31-05(D) (Synthetic minor to avoid MACT rule requirements)	Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

- a. In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use dry low NO_x (DLN) combustion technology to reduce NO_x emissions to 15 ppmvd at 15% oxygen, at full load, when burning natural gas, and shall use water injection to reduce NO_x emissions to 42 ppmvd at 15% oxygen, at full load, when burning number two fuel oil.
- b. In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- c. "Start-up" shall be defined as the time necessary to bring a turbine on line from a no load condition to dry low NO_x combustion mode during natural gas combustion or fully activated water injection during fuel oil combustion, not to exceed thirty (30) minutes. Shutdown periods shall not exceed thirty (30) minutes.
- d. The minimum stack height for this emissions unit shall be at least 88 feet above the ground.
- e. "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72 MW.
- f. If exhaust stack gas flowrate is not monitored as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NO_x continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NO_x) to meet these requirements, except as provided in 40 CFR 75.12(e). If used, the relative accuracy requirements of Performance Specifications 6 shall apply to the NO_x and CO continuous emissions monitoring systems.
- g. If this emissions unit meets the requirements of 40 CFR 75.19(a)(1), (a)(2) and (b), the low mass emissions (LME) excepted methodology in 40 CFR 75.19(c) may be used in lieu of continuous emission monitoring systems or, if applicable, in lieu of methods under Appendices D, E, and G to 40 CFR Part 75, for the purpose of determining the unit heat input, NO_x, SO₂, and CO₂ mass emissions, and the NO_x emission rate under 40 CFR Part 75. If the permittee of a qualifying emissions unit elects to use the LME methodology, it must be used for all parameters that are required to be monitored by the applicable program(s). For example, for an Acid Rain Program LME unit, the methodology must be used to estimate SO₂, NO_x, and CO₂ mass emissions, NO_x emission rate, and unit heat input.

c) Operational Restrictions

- (1) The sulfur content of the number two fuel oil fired in this emissions unit shall not exceed 0.05%, by weight.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (2) The permittee shall be prohibited from combusting fuel oil in this emissions unit from April 1 through September 30 of each year, except for one-half hour of each month or under emergency conditions when natural gas supplies are not available. This exclusion is permitted contingent upon the submittal to the Regional Air Pollution Control Agency of adequate documentation from the permittee that natural gas was not available.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (3) The number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (4) The natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (5) In lieu of complying with the natural gas usage restriction specified above, the permittee may combust an additional 150 cubic feet of natural gas in this emissions unit for each gallon of number two fuel oil, which is not combusted by this emissions unit. Under no circumstance shall the natural gas consumption exceed 3,870,000,000 cubic feet, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (6) The permittee shall burn only pipeline quality natural gas, or number two fuel oil in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888].

d) Monitoring and/or Recordkeeping Requirements

- (1) Continuous SO₂ Emissions Monitoring:

- a. The permittee shall either operate or maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit (SO₂ pollutant concentration and flow monitor), in units of the applicable standard(s) or meet the requirements of 40 CFR Part 75 Appendix D or 40 CFR Part 75.19(c). Such continuous monitoring and recording equipment (SO₂ pollutant concentration and flow monitor) shall comply with the requirements specified in 40 CFR part 60 and 40 CFR Part 75.



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- b. If used, each continuous monitoring system (SO₂ pollutant concentration and flow monitor) consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor): emissions of SO₂ in parts per million, emissions of SO₂ in lb/MMBTU in the appropriate averaging period (e.g., hourly), results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) or excepted system designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous SO₂ monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

(2) Continuous NO_x Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s) or an excepted monitoring system that meets the requirements of 40 CFR 75.19 (water-to-fuel ratio for water injection controls and operating mode and combustion reference temperature for dry low NO_x systems, as specified in the quality assurance plan specified in 40 CFR 75.19(e)(5)). Such



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continuous NO_x monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.

- b. If used, each continuous NO_x monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in ppmvd at 15% oxygen at full load, emissions of NO_x in lbs/hr, and results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous nitrogen oxides monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
- h. For each low mass emissions unit for which fuel-and-unit-specific NO_x emission rates are determined in accordance with 40 CFR 75.19(c)(1)(iv) and which has add-on NO_x emission controls of any kind or uses dry low- NO_x technology, the permittee shall develop and keep on-site a quality assurance plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameters monitored (e.g., water-to-fuel ratio) and the



acceptable ranges for each parameter used to determine proper operation of the unit's NO_x controls.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

(3) Continuous CO Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s) or, if the emissions unit meets the requirements of 40 CFR 75.19 for SO₂, NO_x and CO₂, establish fuel-and-unit-specific CO emissions rates using the same methodology as specified for NO_x in 40 CFR 75.19(c)(1)(iv)(G). Note that the requirements of 40 CFR 75 do not apply to CO emissions. Such continuous CO monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.
- b. If used, each continuous CO monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

- (4) The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F or the procedures specified in 40 CFR Part 75.19(c)(3)(ii).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The amount of number two fuel oil burned, in gallons.
 - b. The rolling, 12-month summation of number two fuel oil usage, in gallons.
 - c. The amount of natural gas burned, in million cubic feet (MMCF).
 - d. The rolling, 12-month summation of natural gas usage, in MMCF.
 - e. The rolling, 12-month summation of NO_x emissions, in tons.
 - f. The rolling, 12-month summation of CO emissions, in tons.
 - g. The rolling, 12-month summation of SO₂ emissions, in tons.
 - h. The number of hours the emissions unit is in operation when combusting natural gas.
 - i. The number of hours the emissions unit is in operation when combusting number two fuel oil.
 - j. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - k. The date, time and duration, in minutes, of each start-up and shutdown. (The terms start-up and shutdown are defined in b)(2)c.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (6) The permittee shall monitor and record all periods of time when the unit is operated at "full load" conditions, based upon the definition of full load in b)(2)e.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (7) In accordance with 40 CFR Part 60, Subpart GG, Section 60.334(h)(1), the permittee shall monitor the sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The frequency of determination of this value shall be in accordance with 40 CFR 60.334(i).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

- (8) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's

analyses for sulfur content and heat content, and the calculated SO₂ emission rate (in lb/MMBtu).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (9) Pursuant to 40 CFR 60.334(i)(1) or (3), the permittee shall determine fuel sulfur content in accordance with the requirements of 40 CFR 60.335(b)(10)(i) and 60.335(b)(10)(ii).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

- (10) For each day during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (11) If the permittee uses 40 CFR Part 75 Appendix D to comply with the SO₂ emissions limit, the permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (12) If using a continuous diluent monitor, the permittee shall operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. The monitoring and recording equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (13) The permittee shall maintain monthly records of the following information for emissions units P005, P006, and P007, combined:

- a. The formaldehyde emissions, in tons (sum the formaldehyde emissions for emissions units P005, P006, and P007).
- b. The CO emissions, in tons (sum the CO emissions for emissions units P005, P006, and P007).
- c. The rolling, 12-month summation of formaldehyde emissions, in tons.
- d. The rolling, 12-month summation of CO emissions, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (14) If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain hourly records of the following information:
- a. Date and hour;
 - b. Unit operating time (rounded up to the nearest fraction of an hour (in equal increments that can range from one hundredth to one quarter of an hour, at the option of the owner or operator);
 - c. Fuel type (pipeline natural gas, natural gas, other gaseous fuel, residual oil, or diesel fuel). If more than one type of fuel is combusted in the hour, either:
 - i. Indicate the fuel type which results in the highest emission factors for NO_x (this option is in effect through December 31, 2008); or
 - ii. Indicate the fuel type resulting in the highest emission factor for each parameter (SO₂, NO_x emission rate, and CO₂) separately (this option is required on and after January 1, 2009);
 - d. Hourly NO_x emission rate (lb/mmBtu, rounded to the nearest thousandth);
 - e. Hourly NO_x mass emissions (lbs, rounded to the nearest tenth);
 - f. Hourly SO₂ mass emissions (lbs, rounded to the nearest tenth);
 - g. Hourly CO₂ mass emissions (tons, rounded to the nearest tenth);
 - h. Hourly CO mass emissions (tons, rounded to the nearest tenth);
 - i. Hourly calculated unit heat input in mmBtu;
 - j. Hourly unit output in gross load or steam load;
 - k. The method of determining hourly heat input: unit maximum rated heat input, unit long term fuel flow or group long term fuel flow;
 - l. The method of determining NO_x emission rate used for the hour: default based on fuel combusted, unit specific default based on testing or historical data, group default based on representative testing of identical units, unit specific based on testing of a unit with NO_x controls operating, or missing data value;
 - m. Control status of the unit;
 - n. Base, peak or full load indicator (as applicable); and
 - o. Multiple fuel flag.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

- (15) If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain quarterly records of the following information:



- a. Type of fuel;
- b. Beginning date and hour of long term fuel flow measurement period;
- c. End date and hour of long term fuel flow period;
- d. Quantity of fuel measured;
- e. Units of measure;
- f. Fuel gross calorific value (GCV) value used to calculate heat input;
- g. Units of GCV;
- h. Method of determining fuel GCV used;
- i. Method of determining fuel flow over period;
- j. Component-system identification code;
- k. Quarter and year;
- l. Total heat input (mmBtu); and
- m. Operating hours in period.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1), and PTI 08-04888]

e) Reporting Requirements

(1) Continuous SO₂ Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous SO₂ monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.



- c. If there are no excess SO₂ emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(2) Continuous NO_x Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

For emissions units using water to fuel ratio monitoring, an excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the excepted monitoring system, falls below the water to fuel ratio defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Any unit operating hour in which no water or steam is injected into the emissions unit shall also be considered an excess emission. Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

For emissions units using combustion reference temperature monitoring, an excess emission shall be any unit operating hour for which the average combustion reference temperature, as measured by the excepted monitoring system, falls below the minimum combustion reference temperature defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Each report shall include the average combustion reference temperature, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

For emissions units using operating mode monitoring, an excess emission shall be any unit operating hour which the emissions unit was not operating in the pre-mix steady state mode, as measured by the excepted monitoring system. Each report shall include the operating mode, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The



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permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

For emissions units using water or steam to fuel ratio monitoring, a period of monitor downtime shall be any unit operating hour in which water or steam is injected into the emissions unit, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

For emissions units using combustion reference temperature monitoring, a period of monitor downtime shall be any unit operating hour in which the essential parametric data needed to determine the combustion reference temperature is unavailable or invalid.

For emissions units using operating mode monitoring, a period of monitor downtime shall be any unit operating hour in which the essential parametric data needed to determine the operating mode is unavailable or invalid.

- c. If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(3) Continuous CO Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of CO values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous CO monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the



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continuous CO monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.

- c. If there are no excess CO emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (4) The permittee shall submit quarterly deviation (excursion) reports to the Regional Air Pollution Control Agency that identify any exceedances of the following information:
 - a. The rolling, 12-month usage limitation for number two fuel oil of 8,580,000 gallons (for this emissions unit).
 - b. The rolling, 12-month usage limitation for natural gas of 2,580 MMCF (for this emissions unit).
 - c. The rolling, 12-month NO_x emission limitation of 110 tons (for this emissions unit).
 - d. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for this emissions unit.
 - e. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for emissions units P005, P006, and P007, combined.
 - f. The rolling, 12-month SO₂ emission limitation of 30.86 tons, for this emissions unit.
 - g. All time periods during which the duration for all start-up and/or shutdown periods did not comply with the requirements established in b)(2)c.
 - h. For the number two fuel oil, any exceedances of the 0.05%, by weight, sulfur content and the calculated SO₂ emissions rate, in lb/MMBtu.
 - i. Any time during which the permittee burns a fuel other than pipeline quality natural gas, or number two fuel oil.
 - j. The rolling, 12-month formaldehyde emission limitation of 4.20 tons, for emissions units P005, P006, and P007, combined.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.



[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (5) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The reports shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These reports shall be postmarked by April 30, July 30, October 30, and January 30 and each report shall cover the previous calendar quarter.

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1), and PTI 08-04888].

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations

Particulate/PM₁₀ emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion and 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion.

Applicable Compliance Method

If required, compliance shall be based upon stack testing in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and, 40 CFR Part 51, Appendix M, Method 201 or 201A and 202.

[Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1), and PTI 08-04888]

b. Emission Limitation

Particulate/PM₁₀ emissions from this emissions unit shall not exceed 15.5 TPY.

Applicable Compliance Method

Compliance with the annual allowable particulate/PM₁₀ emissions limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the hourly particulate/PM₁₀ emissions derived from the most recent stack test by the annual number of hours of operation when combusting number two fuel oil (summation of the monthly values from d)(5)i for the calendar year), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the manufacturer-supplied emission factor of 0.0072 lb/mmBtu or the emissions factor derived from the most recent stack test, by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr), and then multiply the result by the



annual number of hours of operation when combusting natural gas (summation of the monthly values from b)(5)h for the calendar year), and then divide by 2000 lbs/ton.

iii. Add f)(1)b.i + f)(1)b.ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

c. Emission Limitations

NO_x emissions from this emissions unit shall not exceed 15 ppmvd at 15% oxygen at full load and 62 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion.

Applicable Compliance Method

If a continuous NO_x monitoring system is used to determine compliance with these allowable NO_x emissions limitations above, compliance shall be based on the use of the continuous NO_x monitoring system specified in d)(2) and the applicable 40 CFR Part 60 and 75 requirements. Emissions calculated using the 40 CFR Part 75 bias adjustment factor or using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.05 lb/mmBtu, which is the NO_x emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, compliance with the allowable NO_x emission limitations above, shall be determined based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Reference Methods 1 - 4 and Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

d. Emission Limitation

NO_x emissions from this emissions unit shall not exceed 110 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable NO_x emission limitation above shall be based upon the record keeping requirements established in d)(2) and d)(5) if



using a continuous NO_x monitoring system, or d)(5), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

e. Emission Limitations

CO emissions from this emissions unit shall not exceed 301 lbs/hr at all operating loads, excluding start-up and shutdown periods when firing natural gas; 413 lbs/hr during start-up and shutdown periods when firing natural gas; and 800 lbs/hr when firing number two fuel oil.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with the allowable CO emissions limitation above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in d)(3). Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.03 lb/mmBtu, which is the CO emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

f. Emission Limitation

CO emissions from this emissions unit shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in d)(3) and d)(5) if using a continuous CO monitoring system, or d)(5), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]



g. Emission Limitation

Total combined CO emissions from emissions units P005, P006 and P007 shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in d)(3), d)(5) and d)(13) if using a continuous CO monitoring system, or d)(5), d)(13), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

h. Emission Limitation

VOC emissions from this emissions unit shall not exceed 10.0 lbs/hr.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

i. Emission Limitation

VOC emissions from this emissions unit shall not exceed 15.0 TPY.

Applicable Compliance Method

Compliance with the annual allowable VOC emission limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the lb VOC/mmBtu emission factor derived from the most recent stack test by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from d)(5)i for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the lb VOC/mmBtu emission factor derived from the most recent stack test by the annual amount of natural gas burned, in mmcf (summation of the monthly values from d)(5)h for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.



iii. Add f)(1)i.i + f)(1)i.ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

j. Emission Limitations

SO₂ emissions from this emissions unit shall not exceed 0.0006 lb/MMBtu during natural gas combustion and 0.055 lb/MMBtu during number two fuel oil combustion.

Applicable Compliance Method

When firing natural gas, compliance with the allowable SO₂ emission limitation above will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content, in accordance with the appropriate ASTM method, or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-2a (4/00).

When firing number two fuel oil, compliance with the allowable SO₂ emission limitation above shall be based upon the fuel analysis and the record keeping requirements specified in d)(1), d)(7) and d)(8), and the use of the equations specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate with the allowable SO₂ emission limitations above through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

k. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable SO₂ emission limitation above shall be based upon the record keeping requirements established in d)(1), d)(4) and d)(5).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

l. Emission Limitation

Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.



Applicable Compliance Method

Compliance with the annual allowable formaldehyde emission limitation may be determined as follows:

- i. When combusting natural gas, multiply the emission factor of 0.00071 lb formaldehyde/MMBtu (AP-42, Table 3.1-3, revised 4/00) by the annual amount of natural gas burned, in mmcf (summation of the monthly values from d)(5)h for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- ii. When combusting number two fuel oil, multiply the emission factor of 0.00028 lb formaldehyde/MMBtu (AP-42, Table 3.1-4, revised 4/00) by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from d)(5)i for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- iii. Add f)(1).i + f)(1).ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

m. Emission Limitation

Visible PE shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1), and PTI 08-04888]

g) Miscellaneous Requirements

- (1) If continuous SO₂ and NO_x monitoring system is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan for the continuous NO_x and SO₂ monitoring systems required pursuant to 40 CFR Part 75, Appendix B must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]



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- (2) If a continuous monitoring system in compliance with 40 CFR 75.19 is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan required pursuant to 40 CFR Part 75.19(e)(5) must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888].



2. Emissions Unit Group -Generator Engines: B507, B508, B509 and B510,

EU ID	Operations, Property and/or Equipment Description
B507	Stationary compression ignition (CI) internal combustion engine (ICE), large bore No. 2 fuel oil-fired electric generator (General Motors Model MP45A); greater than 600 brake horsepower (bHP); complying with 40 CFR 63, Subpart ZZZZ Table 2d #3; and installed before 6/12/06.
B508	Stationary compression ignition (CI) internal combustion engine (ICE), large bore No. 2 fuel oil-fired electric generator (General Motors Model MP45A); greater than 600 brake horsepower (bHP); complying with 40 CFR 63, Subpart ZZZZ Table 2d #3; and installed before 6/12/06.
B509	Stationary compression ignition (CI) internal combustion engine (ICE), large bore No. 2 fuel oil-fired electric generator (General Motors Model MP45A); greater than 600 brake horsepower (bHP); complying with 40 CFR 63, Subpart ZZZZ Table 2d #3; and installed before 6/12/06.
B510	Stationary compression ignition (CI) internal combustion engine (ICE), large bore No. 2 fuel oil-fired electric generator (General Motors Model MP45A); greater than 600 brake horsepower (bHP); complying with 40 CFR 63, Subpart ZZZZ Table 2d #3; and installed before 6/12/06.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 63 Subpart ZZZZ (40 CFR 63.6580 to 63.6675) In accordance with 40 CFR 63.6585, this emissions unit is a stationary internal combustion engine (ICE) subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines.	The existing stationary compression ignition (CI) reciprocating internal combustion engine (RICE), located at an area source for hazardous air pollutants (HAPs), shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ.



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	40 CFR 63.6603(a) Table 2d #3 to Subpart ZZZZ	Emissions of carbon monoxide (CO) shall not exceed 23 ppmvd at 15% O ₂ or emissions of CO shall be reduced by 70% or more.
c.	OAC rule 3745-17-07(A)(1)	The visible Particulate Emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions (PE) shall not exceed 0.062 lb/MMBtu of actual heat input from ICE greater than 600 horsepower (HP).
e.	OAC rule 3745-18-63(I)(3)	The Sulfur Dioxide (SO ₂) emissions shall not exceed 0.5 pound per MM Btu of actual heat input.

(2) Additional Terms and Conditions

a. The permittee shall control the emissions of carbon monoxide (CO) from the stationary RICE exhaust using an oxidation catalyst control device. The permittee shall either limit the concentration of CO to 23 ppmvd or less at 15% O₂ at the outlet of the control device or the average reduction of CO, calculated according to 40 CFR 63.6620(e), shall not be less than 70% of the uncontrolled CO emissions.

[40 CFR 63.6603], [40 CFR 63.6640(a)], and [Subpart ZZZZ Table 2d #3].

b. The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
Applicable Tables from Part 63, Subpart ZZZZ	Comply with: emission limit options in Table 2d #3; operating limitations in Table 2b #2; performance test frequency in Table 3 #4; performance test methods in Table 4 #1 or #3; initial compliance demonstration in Table 5 #1, #2, #5, or #6; continuous compliance monitoring requirements in Table 6 #3 or #10; reporting requirements/frequency in Table 7; and the general provision from Subpart A in Table 8.
40 CFR 63.6603(a)	Maintain compliance with the emission limitation in Table 2d #3 (limit CO to 23 ppmvd at 15% O ₂ or reduce CO by 70%) and the operating limitations identified in Table 2b to Part 63 Subpart ZZZZ.
40 CFR 63.6603;	Conduct an initial performance test within 180 days



<p>40 CFR 63.6612; 40 CFR 63.6620; and Subpart ZZZZ Tables 4 & 5</p>	<p>following the compliance date, or by 11/3/13, using the appropriate test methods in Table 4; while continuously monitoring either CO and O₂ (or CO₂), using continuous emissions monitoring systems (CEMS), or the temperature at the inlet of the catalyst to the control device using a continuous parameter monitoring system (CPMS), as required in Table 5; and establish the operating parameter for the pressure drop across the catalyst.</p>
<p>40 CFR 63.6615; Subpart ZZZZ Table 3 #4; and Table 6 #3 or #10</p>	<p>By the compliance date, either install CEMS to continuously monitor CO at the inlet and outlet of the control device if demonstrating compliance with the control requirement or at the outlet if choosing to comply with the CO concentration limit and conduct annual relative accuracy test audits (RATA) and daily data quality checks according to Table 6 #3 and measure the pressure drop across the catalyst monthly; or As required in Table 6 #10, install CPMS at the inlet of the catalyst and conduct subsequent performance tests every 8760 hours of operation or every 3 years, whichever comes first, to demonstrate compliance with the chosen CO emission standard, using the test methods in Table 4; and measure the pressure drop across the catalyst monthly.</p>
<p>40 CFR 63.6625(a); or 40 CFR 63.6625(b); and 40 CFR 63.8(c), (d), & (e)</p>	<p>Develop and implement a site-specific monitoring plan for the continuous monitoring system (CMS), to include a quality control program and performance evaluation test plan for the CMS, in accordance with 40 CFR 63.8.</p>
<p>40 CFR 63.6625(g)</p>	<p>Install crankcase ventilation system if not already equipped.</p>
<p>40 CFR 63.6665</p>	<p>Meet all of the general provisions of Subpart A, from Sections 63.1 through 63.15, that apply to the CI RICE, as identified in Table 8 to Subpart ZZZZ.</p>

c) Operational Restrictions

- (1) The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in b)(1)e.

[Authority for term: OAC rule 3745-77-07(A)(1)]

- (2) The permittee shall burn only No. 2 fuel oil in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1)].

- (3) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:



Applicable Rule	Requirement
40 CFR 63.6625(a)(1)	If using CEMS for compliance, CEMS must be installed, operated, and maintained in continuous operation in accordance with the performance specifications of 40 CFR 60, Appendix B.
40 CFR 63.6625(b)(2)	If using CPMS for compliance, CPMS must be installed, operated, and maintained in continuous operation in accordance with the site-specific monitoring plan.
40 CFR 63.6604	Compliance with 80.510(b) for the quality of diesel fuel burned in non-emergency CI ICE with a displacement of less than 30 liters/cylinder and a site rating of more than 300 brake horsepower. Standard for diesel fuel oil.
40 CFR 63.6605	General duty to minimize emissions, with good air pollution control practices for minimizing emissions; and compliance required at all times.
40 CFR 63.6625(h)	Minimize idle and startup time, not to exceed 30 minutes.
40 CFR 63.6603; 40 CFR 63.6640(a); and Subpart ZZZZ Table 2b #1	Comply with operating limitations in Table 2b: The temperature of the stationary RICE exhaust at the inlet of the oxidation catalyst shall be maintained at greater than or equal to 450 degrees Fahrenheit and less than or equal to 1,350 degrees Fahrenheit; and the pressure drop across the catalyst shall be maintained at no more than 2 inches of water, plus or minus 10% of the pressure drop measured during the initial performance test, at 100% load.
40 CFR 63.6625(b)(4) through (6)	Must conduct an annual equipment performance evaluation or system accuracy audit on the temperature measurement device. The temperature sensor must meet the minimum tolerance range and must be installed, operated, and maintained as specified in 40 CFR 63.6625(b) and in accordance with the site-specific monitoring plan.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:

Applicable Rule	Requirement
40 CFR 63.6625(a); 40 CFR 63.8; and Subpart ZZZZ Table 6 #3	<p>If installing CEMS to demonstrate continuous compliance must conduct:</p> <ol style="list-style-type: none"> daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, procedure 1. an initial performance evaluation of the CEMS (initially in conjunction with the appropriate test methods in Table 4) using Performance Specifications 3 and 4A (PS 3 and 4A) of 40 CFR Part 60, Appendix B; and annual relative accuracy test audits (RATA) for each CEMS according to the requirements in 40 CFR 63.8 and using PS 3 and 4A of 40 CFR Part 60, Appendix B. <p>Each CEMS must complete a minimum of 1 cycle of operation</p>



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	each 15-minute period; and need at least 2 readings to have a valid hour of data. Data from the CEMS shall be reduced to 1-hour and 4-hour averages according to Table 6 #3.
40 CFR 63.6625(b); 40 CFR 63.8; and Subpart ZZZZ Table 6 #10	If installing CPMS to demonstrate continuous compliance, the CPMS must collect data at least once every 15 minutes and the catalyst inlet temperature shall be reduced to 4-hour rolling averages. The pressure drop across the catalyst must be monitored and recorded monthly. Develop site-specific monitoring plan for the CPMS.
40 CFR 63.6603 and Subpart ZZZZ Table 2	If not using CPMS to demonstrate compliance, maintain a daily log to record the catalyst inlet temperature. Maintain a monthly record of the pressure drop across the catalyst.
40 CFR 63.6635	Except for monitor malfunctions, associated repairs, and required quality assurance activities, must continuously monitor that the RICE is operating. Must use all valid data (not recorded during malfunctions, repairs, or required quality assurance or control activities) in calculations used to report emissions or operating levels.
40 CFR 63.6640(a)	Demonstrate continuous compliance with the emission limitation and operating limitations identified in Tables 2d and 2b according to the methods specified in Table 6 to Subpart ZZZZ.
40 CFR 63.6655(a) and 40 CFR 63.10	Keep records of: 1. each notification and report submitted to comply with Subpart ZZZZ; 2. the occurrence and duration of each malfunction of the RICE and any control or monitoring equipment; 3. corrective actions taken during each period of malfunction to minimize emissions and restore normal operations; 4. records of performance tests and performance evaluations; 5. all required maintenance performed on air pollution control and monitoring equipment; and 6. any excess emissions or parameter monitoring exceedances, as identified by 40 CFR 63.10.
40 CFR 63.6655(b); 40 CFR 63.10(b); and 40 CFR 63.8(d)	Keep records for each CEMS or CPMS used to demonstrate compliance, including: the performance evaluation/test plan; previous versions of the performance evaluation plan; performance tests and evaluations; results of the quality control program; CMS calibration checks; maintenance performed on air pollution control and monitoring equipment; the occurrence, duration, and corrective actions taken during periods of malfunction; and all measurements needed to demonstrate compliance with the relevant standard.
40 CFR 63.6655(d)	Keep the records required in Table 6 to Subpart ZZZZ to demonstrate continuous compliance.
40 CFR 63.6625(h)	Maintain a record of each idle and/or startup time that exceeded 30 minutes.
40 CFR 63.6660	Records readily available and retained for at least 5 years after the date of occurrence or date of report according to 63.10(b)(1).

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.



a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the director.

[Authority for term: OAC rules 3745-18-04(E)(3) and 3745-77-07(C)(1)]

- (3) On each day during which the permittee burns a fuel other than No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)].

e) Reporting Requirements

- (1) The permittee shall comply with the following applicable requirements identified in 40 CFR Part 63, Subpart ZZZZ:



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Applicable Rule	Requirement
40 CFR 63.6604	Identify in the semiannual compliance reports any period of time (date and number of hours), during the reporting period, that the quality of oil burned in this emissions unit did not meet the requirements established in 40 CFR 80.510(b).
40 CFR 63.6640(b)	Submit a report of each instance in which the emission limitation or operating limitations in Tables 2d and 2b were not met; these deviations to be reported according to the requirements of 63.6650.
40 CFR 63.6640(e)	Submit a report of each instance in which the applicable requirements in Table 8 to Subpart ZZZZ, the general provisions from Subpart A, were not met.
40 CFR 63.6645(a)(2)	Submit all notifications required per 63.7(b) and (c); 63.8(e), (f)(4), and (f)(6); and 63.9(b) through (e), (g), and (h) that apply to the CI RICE.
40 CFR 63.6625(a) & (b); 40 CFR 63.7(c); and 40 CFR 63.8(d) & (e)(3)	Upon request, submit a performance evaluation test plan for each monitoring system and/or the site-specific test plan to the office requesting it.
40 CFR 63.6645(g); 40 CFR 63.7(b); 40 CFR 63.8(e); and 40 CFR 63.9(e) & (g)	Submit a Notification of Intent to conduct a performance test for the emissions unit or a performance evaluation of the CMS at least 60 days before the test is scheduled to begin.
40 CFR 63.6645(h); 40 CFR 63.6630(c); 40 CFR 63.8(e)(5); 40 CFR 63.9(h); 40 CFR 63.10(d)(2) & (e)(2); and OAC rule 3745-15-04(A)	Submit a Notification of Compliance Status for each compliance demonstration required in Tables 3 and 5 to Subpart ZZZZ, including the performance test and CMS performance evaluation results, before the close of business on the 60 th day following the completion of the test; or within 30 days of the initial compliance demonstration if the demonstration does not include a performance test. OAC rule 3745-15-04(A) requires performance test results to be submitted within 30 days of the test date unless additional time is requested.
40 CFR 63.6650(a)	Submit each applicable report in Table 7 of Subpart ZZZZ.
40 CFR 63.6650(b)(1) to (5) and Subpart ZZZZ Table 7 #1	Following the initial compliance date, submit Semiannual Compliance Reports to include the information identified in 63.6650(c) through (f), as applicable to the CI ICE. Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 st through June 30 th and July 1 st through December 31 st . The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 st and January 31 st .
40 CFR 63.6650(c)	63.6650(c) contains the required information to be submitted in each compliance report.
40 CFR 63.6650(d) & (e)	63.6650(d) contains the required information to be submitted for each deviation from an emission or operating limitation not monitored by a continuous monitoring system (CMS) and 63.6650(e) the information needed where using a CMS to comply with the emission or operating limitation.

- (2) The permittee shall notify the director (the appropriate District Office or local air agency) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from b)(1). The notification shall include a copy of such record and shall be sent to the director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than No. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)].

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

b. Emission Limitation

PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method

Compliance shall be based upon an emission factor of 0.062 lb/mmBtu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

The permittee may demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

[Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1)]

c. Emission Limitation

Sulfur dioxide emissions shall not exceed 0.5 lb/mmBtu actual heat input.

Applicable Compliance Method

Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received or each daily sample collected during a calendar month meets the limitation. The permittee may demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

[Authority for term: OAC rules 3745-18-04(F) and 3745-77-07(C)(1)]

d. Emission Limitations:

23 ppmvd CO at 15% O₂ or

reduce CO by 70% and

Applicable Compliance Method:

The appropriate tests methods from Table 4 to Subpart ZZZZ shall be conducted based on the option chosen for compliance, i.e., the part per million concentration or percent reduction. The appropriate emission and/or operating limitations, required per 40 CFR 63.6630 and identified in Table 5, shall be established and compliance demonstrated during each performance test.

The temperature at the inlet to the catalyst shall be monitored during the performance test and maintained between 450 °F and 1350 °F. The 3-hour block average temperature at the inlet to the catalyst shall be documented during performance tests and the pressure drop shall be recorded to establish the operating range for the pressure drop across the catalyst. Per 63.6640(b), if the catalyst is changed or the control device replaced, a new performance test must be conducted to demonstrate compliance with the emission limitation and to reestablish the values for or compliance with the operating parameters.

Each performance test shall consist of 3 separate test runs and each test run shall last a minimum of 1 hour and shall be conducted during normal operations. The engine percent load, during the performance test, shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load and the estimated percent load shall be included in the notification of compliance.

A compliant performance test shall demonstrate that either the CO emissions have been reduced by 70% or that the average CO concentration is less than or equal to 23 ppmvd, corrected to 15 percent O₂ on a dry basis, and from three 1-hour or longer performance test runs.



If demonstrating compliance with the 70% control requirement for CO, the permittee may use a portable CO and O₂ analyzer at the inlet and outlet of the control device and use ASTM Method D6522-00 to meet the performance testing requirement in Table 4 to Subpart ZZZZ. The CO concentrations at the inlet and outlet of the control device must be normalized to a dry basis and to 15% oxygen, or an equivalent percent CO₂, as required in 40 CFR 63.6620(e).

The following test methods shall be employed to demonstrate compliance with the emission limitation for CO or may be used to demonstrate compliance with the control requirement for CO:

- i. Method 1 or 1A of 40 CFR Part 60, Appendix A to select the sampling port location and the number of traverse points
- ii. Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A or ASTM Method D6522-00 to measure O₂ at the inlet and outlet of the control device to normalize the CO concentration(s).
- iii. Method 4 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D6348-03 to measure the moisture content at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure the moisture content of the stationary RICE exhaust.
- iv. Method 10 of 40 CFR Part 60, Appendix A; or Method 320 of 40 CFR Part 63, Appendix A; or ASTM D 6348-03 to measure CO at the inlet and outlet of the control device if demonstrating compliance through the percent control or to measure CO at the exhaust of the stationary ICE.
- v. The following equation shall be used to normalize the CO concentrations to a dry basis and to 15 percent oxygen (O₂)**:

$$C_{adj} = C_d (5.9 / 20.9 - \% O_2)$$

Where:

C_{adj}= calculated CO concentration adjusted to 15 percent O₂.

C_d= measured concentration of CO, uncorrected.

5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.

%O₂ = measured O₂ concentration, dry basis, percent.

** Optionally, the pollutant concentrations can be corrected to 15% O₂ using a CO₂ correction factor, by calculating the fuel factor (F_o value) using Method 19 results obtained during the performance test (40 CFR 63.6620(e)(2)).



- vi. If compliance is demonstrated for the control efficiency for CO, the following equation shall be used to determine the percent reduction:

$$R = (C_i - C_o) / C_i \times 100$$

Where:

C_i = concentration of CO at the control device inlet,

C_o = concentration of CO at the control device outlet, and

R = percent reduction of CO emissions.

If using CEMS to monitor and comply with the CO concentration limitation or requirement to reduce CO emissions, the permittee shall conduct annual relative accuracy test audits (RATA) using Performance Specifications 3 and 4A of 40 CFR Part 60 Appendix B and daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1.

If using a CPMS to demonstrate compliance, the permittee shall conduct subsequent performance tests for CO (concentration or % reduction) every 8,760 hours of operation or every 3 years, whichever comes first.

The permittee shall notify the Director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency) in writing of each scheduled performance test date or RATA for the CEMS at least 60 calendar days before it is scheduled, to allow the agency time to review and approve the site-specific test plan and to arrange for an observer to be present during the compliance demonstration.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

[40 CFR 63.7(a)(2), (b)(1), and (e)], [40 CFR 63.6603(a)], [40 CFR 63.6612], [40 CFR 63.6615], [40 CFR 63.6620], [40 CFR 63.6630], [40 CFR 63.6640(a) and (b)], [40 CFR 63.6645(a)(2)], [Part 63, Subpart ZZZZ, Table 2d #3; Table 2b; Table 3 #4; Table 4 #1 or #3; Table 5 #1, #2, #5, or #6; and Table 6 #3 or #10], [OAC 3745-110-03(F)(3)], [OAC 3745-110-05(A) and (F)], and [OAC rule 3745-15-04(A)]

g) Miscellaneous Requirements

- (1) None.



3. Emissions Unit Group -Turbines: P005,P006,

EU ID	Operations, Property and/or Equipment Description
P005	80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-1
P006	80 MW (1115 mmBtu/hr nominal heat input) natural gas or fuel oil fired simple cycle turbine with water injection controls, CT-2

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04888	<p>Sulfur dioxide (SO₂) emissions from this emissions unit shall not exceed 0.0006 lb/mmBtu during natural gas combustion, 0.055 lb/mmBtu during number two fuel oil combustion, and 30.86 tons per year (TPY).</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.0 lbs/hr and 15.0 TPY.</p> <p>Particulate/PM₁₀ emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion; 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion; and 15.5 TPY.</p> <p>Nitrogen oxides (NO_x) emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion; and 132 tons per rolling, 12-</p>



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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>month period.</p> <p>The maximum one-hour carbon monoxide (CO) emissions from this emissions unit shall not exceed 2000 lbs/hr (1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average).</p> <p>CO emissions from this emissions unit shall not exceed 160.8 tons per rolling 12-month period, including periods of start-up and shutdown, with the total combined CO emissions from emissions units P005, P006 and P007 not to exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.</p> <p>Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.</p> <p>See b)(2)d.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 3745-31-20, 3745-21-08(B), 3745-31-05(D) and 40 CFR Part 52, Section 52.21.</p>
b.	40 CFR Part 75	See Section A.5.
c.	OAC rules 3745-31-10 through 3745-31-20	The SO ₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.
d.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(F) 40 CFR Part 60 Subpart GG OAC rule 3745-16-02	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to 40 CFR Part 52, Section 52.21 and OAC rules 3745-31-05(A)(3), and 3745-31-10 through 3745-31-20.
e.	OAC rule 3745-14	See Section B.2.
f.	OAC rule 3745-31-05(D) (Synthetic minor to avoid MACT rule requirements)	The total combined formaldehyde emissions from this emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

- a. In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use water injection to reduce NO_x emissions to 25 ppmvd at 15% oxygen, at full load, when burning natural gas, and 42 ppmvd at 15% oxygen, at full load, when burning number two fuel oil.
- b. In accordance with OAC rules 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21, the permittee shall use natural gas as the primary fuel and number two fuel oil with a maximum sulfur content of 0.05 percent by weight, as the back-up fuel.
- c. "Start-up" shall be defined as the time necessary to bring a turbine on line from a no load condition to fully activated water injection, not to exceed thirty (30) minutes. Shutdown periods shall not exceed thirty (30) minutes.
- d. The minimum stack height for this emissions unit shall be at least 88 feet above the ground.
- e. "Full load" shall be defined as all periods when the hourly average electrical output exceeds 72 MW.
- f. If exhaust stack gas flowrate is not monitored as required by 40 CFR Part 60, Appendix B - Performance Specification 6, the permittee shall use a certified NO_x continuous emissions monitoring system in conjunction with a fuel flow monitor as described in 40 CFR Part 75, and certified CO continuous emissions monitoring system in conjunction with a fuel flow monitor (in a manner similar to that used for NO_x) to meet these requirements, except as provided in 40 CFR 75.12(e). If used, the relative accuracy requirements of Performance Specifications 6 shall apply to the NO_x and CO continuous emissions monitoring systems.
- g. If this emissions unit meets the requirements of 40 CFR 75.19(a)(1), (a)(2) and (b), the low mass emissions (LME) excepted methodology in 40 CFR 75.19(c) may be used in lieu of continuous emission monitoring systems or, if applicable, in lieu of methods under Appendices D, E, and G to 40 CFR Part 75, for the purpose of determining the unit heat input, NO_x, SO₂, and CO₂ mass emissions, and the NO_x emission rate under 40 CFR Part 75. If the permittee of a qualifying emissions unit elects to use the LME methodology, it must be used for all parameters that are required to be monitored by the applicable program(s). For example, for an Acid Rain Program LME unit, the methodology must be used to estimate SO₂, NO_x, and CO₂ mass emissions, NO_x emission rate, and unit heat input.

c) Operational Restrictions

- (1) The sulfur content of the number two fuel oil fired in this emissions unit shall not exceed 0.05%, by weight.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (2) The permittee shall be prohibited from combusting fuel oil in this emissions unit from April 1 through September 30 of each year, except for one-half hour of each month or under emergency conditions when natural gas supplies are not available. This exclusion is permitted contingent upon the submittal to the Regional Air Pollution Control Agency of adequate documentation from the permittee that natural gas was not available.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (3) The number two fuel oil usage in this emissions unit shall not exceed 8,580,000 gallons, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (4) The natural gas usage in this emissions unit shall not exceed 2,580,000,000 cubic feet, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (5) In lieu of complying with the natural gas usage restriction specified above, the permittee may combust an additional 150 cubic feet of natural gas in this emissions unit for each gallon of number two fuel oil, which is not combusted by this emissions unit. Under no circumstance shall the natural gas consumption exceed 3,870,000,000 cubic feet, per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888]

- (6) The permittee shall burn only pipeline quality, natural gas or number two fuel oil in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 08-04888].

d) **Monitoring and/or Recordkeeping Requirements**

- (1) **Continuous SO₂ Emissions Monitoring:**

- a. The permittee shall either, operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit (SO₂ pollutant concentration and flow monitor), in units of the applicable standard(s) or meet the requirements of 40 CFR Part 75 Appendix D or 40 CFR Part 75.19(c). Such continuous monitoring and recording equipment (SO₂ pollutant concentration and flow monitor) shall comply with the requirements specified in 40 CFR part 60 and 40 CFR Part 75.
- b. If used, each continuous monitoring system (SO₂ pollutant concentration and flow monitor) consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) has been certified in accordance with the



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applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

- d. If used, the permittee shall maintain records of the following data obtained by the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor): emissions of SO₂ in parts per million, emissions of SO₂ in lb/MMBTU in the appropriate averaging period (e.g., hourly), results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) or excepted system designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous SO₂ monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous SO₂ monitoring system (SO₂ pollutant concentration and flow monitor) in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(2) Continuous NO_x Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s) or an excepted monitoring system that meets the requirements of 40 CFR 75.19 (water-to-fuel ratio for water injection controls, as specified in the quality assurance plan specified in 40 CFR 75.19(e)(5)). Such continuous NO_x monitoring and recording equipment shall comply with the applicable requirements specified in 40 CFR Part 60 and Part 75.
- b. If used, each continuous NO_x monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous NO_x monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous NO_x monitoring system: emissions of NO_x in ppmvd at 15% oxygen at full load, emissions of NO_x in lbs/hr, and results of daily zero/span calibration checks, results of quarterly cylinder gas audits, linearity check, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the applicable requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous nitrogen oxides monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.
- g. Data substitution, when required by 40 CFR Part 75, shall be performed in accordance with the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.
- h. For each low mass emissions unit for which fuel-and-unit-specific NO_x emission rates are determined in accordance with 40 CFR 75.19(c)(1)(iv) and which has add-on NO_x emission controls of any kind or uses dry low- NO_x technology, the permittee shall develop and keep on-site a quality assurance plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameters monitored (e.g., water-to-fuel ratio) and the acceptable ranges for each parameter used to determine proper operation of the unit's NO_x controls.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(3) Continuous CO Emissions Monitoring:

- a. The permittee shall either operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the



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applicable standard(s) or, if the emissions unit meets the requirements of 40 CFR 75.19 for SO₂, NO_x and CO₂, establish fuel-and-unit-specific CO emissions rates using the same methodology as specified for NO_x in 40 CFR 75.19(c)(1)(iv)(G). Note that the requirements of 40 CFR 75 do not apply to CO emissions. Such continuous CO monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

- b. If used, each continuous CO monitoring system consists of all the equipment used to acquire and record data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.
- c. If used, the permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous CO monitoring system has been certified in accordance with the applicable requirements specified in 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.
- d. If used, the permittee shall maintain records of the following data obtained by the continuous CO monitoring system: emissions of CO in lbs/hr, results of daily zero/span calibration checks, results of quarterly cylinder gas audits, or relative accuracy test audits, and magnitude of manual calibration adjustments.
- e. The permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). The plan shall follow the applicable requirements for 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook documenting the activities related to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.
- f. The permittee may conduct the relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR Part 75, Appendix B; however, the permittee is still required to provide the audit results in units of the applicable standard(s), in accordance with 40 CFR Part 60. Cylinder gas audits may be conducted in accordance with the frequencies specified in 40 CFR Part 75, Appendix B for linearity checks. In addition, linearity checks conducted pursuant to 40 CFR Part 75, Appendix B, may be used in place of quarterly cylinder gas audits, as required in 40 CFR Part 60.

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (4) The permittee shall maintain hourly records of the total actual heat input values for this emissions unit, in MMBTU/hr. The total actual heat input values shall be determined using the applicable procedures specified in 40 CFR Part 75, Appendix F or the procedures specified in 40 CFR Part 75.19(c)(3)(ii).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1) and PTI 08-04888]



- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The amount of number two fuel oil burned, in gallons.
 - b. The rolling, 12-month summation of number two fuel oil usage, in gallons.
 - c. The amount of natural gas burned, in million cubic feet (MMCF).
 - d. The rolling, 12-month summation of natural gas usage, in MMCF.
 - e. The rolling, 12-month summation of NO_x emissions, in tons.
 - f. The rolling, 12-month summation of CO emissions, in tons.
 - g. The rolling, 12-month summation of SO₂ emissions, in tons.
 - h. The number of hours the emissions unit is in operation when combusting natural gas.
 - i. The number of hours the emissions unit is in operation when combusting number two fuel oil.
 - j. The rolling, 12-month summation of formaldehyde emissions, in tons.
 - k. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting natural gas.
 - l. The 30-day average, hourly CO emission rate, in lbs/hr, when the emissions unit is combusting number two fuel oil.
 - m. The date, time and duration, in minutes, of each start-up and shutdown. (The terms start-up and shutdown are defined in b)(2)c.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (6) The permittee shall monitor and record all periods of time when the unit is operated at "full load" conditions, based upon the definition of full load in b)(2)e.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (7) In accordance with 40 CFR Part 60, Subpart GG, Section 60.334(h)(1), the permittee shall monitor the sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.334(h)(3). The frequency of determination of this value shall be in accordance with 40 CFR 60.334(i).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (8) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's

analyses for sulfur content and heat content, and the calculated SO₂ emission rate (in lb/MMBtu).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (9) Pursuant to 40 CFR 60.334(i)(1) or (3), the permittee shall determine fuel sulfur content in accordance with the requirements of 40 CFR 60.335(b)(10)(i) and 60.335(b)(10)(ii).

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (10) For each day during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (11) If the permittee uses 40 CFR Part 75 Appendix D to comply with the SO₂ emissions limit, the permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (12) If using a continuous diluent monitor, the permittee shall operate and maintain equipment to continuously monitor and record the percent oxygen in the stack serving this emissions unit when the emissions unit is in operation. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. The monitoring and recording equipment shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (13) The permittee shall maintain monthly records of the following information for emissions units P005, P006, and P007, combined:

- a. The formaldehyde emissions, in tons (sum the formaldehyde emissions for emissions units P005, P006, and P007).
- b. The CO emissions, in tons (sum the CO emissions for emissions units P005, P006, and P007).
- c. The rolling, 12-month summation of formaldehyde emissions, in tons.
- d. The rolling, 12-month summation of CO emissions, in tons.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (14) If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain hourly records of the following information:
- a. Date and hour;
 - b. Unit operating time (rounded up to the nearest fraction of an hour (in equal increments that can range from one hundredth to one quarter of an hour, at the option of the owner or operator).
 - c. Fuel type (pipeline natural gas, natural gas, other gaseous fuel, residual oil, or diesel fuel). If more than one type of fuel is combusted in the hour, either:
 - i. Indicate the fuel type which results in the highest emission factors for NO_x (this option is in effect through December 31, 2008); or
 - ii. Indicate the fuel type resulting in the highest emission factor for each parameter (SO₂, NO_x emission rate, and CO₂) separately (this option is required on and after January 1, 2009);
 - d. Hourly NO_x emission rate (lb/mmBtu, rounded to the nearest thousandth);
 - e. Hourly NO_x mass emissions (lbs, rounded to the nearest tenth);
 - f. Hourly SO₂ mass emissions (lbs, rounded to the nearest tenth);
 - g. Hourly CO₂ mass emissions (tons, rounded to the nearest tenth);
 - h. Hourly CO mass emissions (tons, rounded to the nearest tenth);
 - i. Hourly calculated unit heat input in mmBtu;
 - j. Hourly unit output in gross load or steam load;
 - k. The method of determining hourly heat input: unit maximum rated heat input, unit long term fuel flow or group long term fuel flow;
 - l. The method of determining NO_x emission rate used for the hour: default based on fuel combusted, unit specific default based on testing or historical data, group default based on representative testing of identical units, unit specific based on testing of a unit with NO_x controls operating, or missing data value;
 - m. Control status of the unit;
 - n. Base, peak or full load indicator (as applicable); and
 - o. Multiple fuel flag.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (15) If the permittee uses 40 CFR Part 75.19 to comply with the SO₂ and NO_x emissions limits, the permittee shall maintain quarterly records of the following information:

- a. Type of fuel;
- b. Beginning date and hour of long term fuel flow measurement period;
- c. End date and hour of long term fuel flow period;
- d. Quantity of fuel measured;
- e. Units of measure;
- f. Fuel gross calorific value (GCV) value used to calculate heat input;
- g. Units of GCV;
- h. Method of determining fuel GCV used;
- i. Method of determining fuel flow over period;
- j. Component-system identification code;
- k. Quarter and year;
- l. Total heat input (mmBtu); and
- m. Operating hours in period.

[Authority for term: 40 CFR Part 75, OAC rule 3745-77-07(C)(1) and PTI 08-04888]

e) Reporting Requirements

(1) Continuous SO₂ Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO₂ values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total SO₂ emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous SO₂ monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.



- c. If there are no excess SO₂ emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous SO₂ monitoring system (if used) while the emissions unit was on line shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(2) Continuous NO_x Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

For emissions units using water to fuel ratio monitoring, an excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the excepted monitoring system, falls below the water to fuel ratio defined in the quality assurance plan required by 40 CFR 75.19(e)(5). Any unit operating hour in which no water or steam is injected into the emissions unit shall also be considered an excess emission. Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load during each excess emission.

- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

For emissions units using water or steam to fuel ratio monitoring, a period of monitor downtime shall be any unit operating hour in which water or steam is injected into the emissions unit, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.

- c. If there are no excess NO_x emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction.



The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(3) Continuous CO Emissions Reporting:

- a. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of CO values in excess of the applicable emission limitations specified in the terms and conditions of this permit. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Regional Air Pollution Control Agency documenting any continuous CO monitoring system downtime (if used) while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess CO emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the continuous CO monitoring system (if used) while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

(4) The permittee shall submit quarterly deviation (excursion) reports to the Regional Air Pollution Control Agency that identify any exceedances of the following information:

- a. The rolling, 12-month usage limitation for number two fuel oil of 8,580,000 gallons (for this emissions unit).
- b. The rolling, 12-month usage limitation for natural gas of 2,580 MMCF (for this emissions unit).

- c. The rolling, 12-month NO_x emission limitation of 132 tons (for this emissions unit).
- d. The 30-day average, hourly CO emission limitation, when the emissions unit was combusting natural gas, of 1700 lbs/hr (for this emissions unit).
- e. The 30-day average, hourly CO emission limitation when the emissions unit was combusting number two fuel oil, of 350 lbs/hr (for this emissions unit).
- f. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for this emissions unit.
- g. The rolling, 12-month CO emission limitation of 160.8 tons, including periods of start-up and shutdown, for emissions units P005, P006, and P007, combined.
- h. The rolling, 12-month SO₂ emission limitation of 30.86 tons, for this emissions unit.
- i. All time periods during which the duration for all start-up and/or shutdown periods did not comply with the requirements established in b)(2)c.
- j. For the number two fuel oil, any exceedances of the 0.05%, by weight, sulfur content and the calculated SO₂ emissions rate, in lb/MMBtu.
- k. Any time during which the permittee burns a fuel other than pipeline quality natural gas or number two fuel oil.
- l. The rolling, 12-month formaldehyde emission limitation of 4.20 tons, for emissions units P005, P006, and P007, combined.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (5) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The reports shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated. These reports shall be postmarked by January 30, April 30, July 30, and October 30 and each report shall cover the previous calendar quarter.

[Authority for term: 40 CFR Part 60, OAC rule 3745-77-07(C)(1) and PTI 08-04888].

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitations

Particulate/PM₁₀ emissions from this emissions unit shall not exceed 8 lbs/hr and 0.0072 lb/mmBtu during natural gas combustion and 15.0 lbs/hr and 0.013 lb/mmBtu during number two fuel oil combustion.

Applicable Compliance Method

If required, compliance shall be based upon stack testing in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A and, 40 CFR Part 51, Appendix M, Method 201 or 201A and 202.

[Authority for term: OAC rules 3745-17-03(B)(10) and 3745-77-07(C)(1), and PTI 08-04888]

b. Emission Limitation

Particulate/PM₁₀ emissions from this emissions unit shall not exceed 15.5 TPY.

Applicable Compliance Method

Compliance with the annual allowable particulate/PM₁₀ emissions limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the hourly particulate/PM₁₀ emissions derived from the most recent stack test by the annual number of hours of operation when combusting number two fuel oil (summation of the monthly values from d)(5)i for the calendar year), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the manufacturer-supplied emission factor of 0.0072 lb/mmBtu or the emissions factor derived from the most recent stack test, by the maximum rated heat input capacity of the emissions unit (1115 mmBtu/hr), and then multiply the result by the annual number of hours of operation when combusting natural gas (summation of the monthly values from b)(5)h for the calendar year), and then divide by 2000 lbs/ton.
- iii. Add f)(1)b.i + f)(1)b.ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

c. Emission Limitations

NO_x emissions from this emissions unit shall not exceed 25 ppmvd at 15% oxygen at full load and 113 lbs/hr during natural gas combustion; and 42 ppmvd at 15% oxygen at full load and 195 lbs/hr during number two fuel oil combustion



Applicable Compliance Method

If a continuous NO_x monitoring system is used to determine compliance with these allowable NO_x emissions limitations above, compliance shall be based on the use of the continuous NO_x monitoring system specified in d)(2) and the applicable 40 CFR Part 60 and 75 requirements. Emissions calculated using the 40 CFR Part 75 bias adjustment factor or using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.09 lb/mmBtu for both P005 and P006, which is the NO_x emissions rate determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, compliance with the allowable NO_x emission limitations above, shall be determined based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Reference Methods 1 - 4 and Method 7 or 7E, using an arithmetic average of three (3) one-hour test runs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

d. Emission Limitation

NO_x emissions from this emissions unit shall not exceed 132 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable NO_x emission limitation above shall be based upon the record keeping requirements established in d)(2) and d)(5) if using a continuous NO_x monitoring system, or d)(5), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

e. Emission Limitation

The maximum one-hour CO emissions from this emissions unit shall not exceed 2000 lbs/hr.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with the allowable CO emissions limitation above, compliance shall be based upon the



Preliminary Proposed Title V Permit

DP&L Tait Generating Station

Permit Number: P0118126

Facility ID: 0857043333

Effective Date: To be entered upon final issuance

data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in d)(3). Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.35 lb/mmBtu for P005 or 0.31 lb/mmBtu for P006, which are the CO emissions rates determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.

If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

f. Emission Limitations

CO emissions from this emissions unit shall not exceed 1700 lbs/hr during natural gas combustion or 350 lbs/hr during number two fuel oil combustion, based on a 30-day average.

Applicable Compliance Method

If a continuous CO monitoring system is used to determine compliance with these allowable CO emissions limitations above, compliance shall be based upon the data from the continuous CO emissions monitoring system and the monitoring and record keeping requirements specified in d)(3) and d)(5) of this permit. Emissions calculated using missing data procedures due to monitor downtime shall not be used to determine compliance with the hourly emission limitation.

When combusting natural gas and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by multiplying the heat input (mmBtu/hr) by 0.35 lb/mmBtu for P005 or 0.31 lb/mmBtu for P006, which are the CO emissions rates determined in accordance with 40 CFR 75.19(c)(1)(iv)(G), or by an emissions factor determined in accordance with 40 CFR 75.19(c)(1)(iv)(A).

When combusting number two fuel oil and using a monitoring system in compliance with 40 CFR 75.19, compliance shall be determined by conducting an emissions test in accordance with 40 CFR 75.19(c)(1)(iv)(A) within 60 days of commencing fuel oil combustion.



If required, the permittee shall demonstrate compliance with the hourly allowable CO emission limitation through stack testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

g. Emission Limitation

CO emissions from this emissions unit shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in d)(3) and d)(5) if using a continuous CO monitoring system, or d)(5), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

h. Emission Limitation

Total combined CO emissions from emissions units P005, P006 and P007 shall not exceed 160.8 tons per rolling, 12-month period, including periods of start-up and shutdown.

Applicable Compliance Method

Compliance with the annual allowable CO emission limitation above shall be based upon the record keeping requirements established in d)(3), d)(5) and d)(13) if using a continuous CO monitoring system, or d)(5), d)(13), d)(14) and d)(15) if using a monitoring system in compliance with 40 CFR 75.19.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

i. Emission Limitation

VOC emissions from this emissions unit shall not exceed 10.0 lbs/hr.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

j. Emission Limitation

VOC emissions from this emissions unit shall not exceed 15.0 TPY.



Applicable Compliance Method

Compliance with the annual allowable VOC emission limitation may be determined as follows:

- i. When combusting number two fuel oil, multiply the 0.003 lb VOC/mmBtu emission factor by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from d)(5)i for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- ii. When combusting natural gas, multiply the 0.004 lb VOC/mmBtu emission factor by the annual amount of natural gas burned, in mmcf (summation of the monthly values from d)(5)h for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- iii. Add j)(1)j.i + j)(1)j.ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

k. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 0.0006 lb/MMBtu during natural gas combustion and 0.055 lb/MMBtu during number two fuel oil combustion.

Applicable Compliance Method

When firing natural gas, compliance with the allowable SO₂ emission limitation above will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall perform or require the supplier to perform an analysis of the natural gas for sulfur content, in accordance with the appropriate ASTM method, or an equivalent method as approved by the Director, in order to demonstrate compliance with this emission limitation using the appropriate equation specified in AP-42 Table 3.1-2a (4/00).

When firing number two fuel oil, compliance with the allowable SO₂ emission limitation above shall be based upon the fuel analysis and the record keeping requirements specified in d)(1), d)(7) and d)(8), and the use of the equations specified in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate with the allowable SO₂ emission limitations above through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]



I. Emission Limitation

SO₂ emissions from this emissions unit shall not exceed 30.86 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable SO₂ emission limitation above shall be based upon the record keeping requirements established in d)(1), d)(4) and d)(5).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

m. Emission Limitation

Total combined formaldehyde emissions from emissions units P005, P006, and P007 shall not exceed 4.20 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance with the annual allowable formaldehyde emission limitation may be determined as follows:

- i. When combusting natural gas, multiply the emission factor of 0.00071 lb formaldehyde/MMBtu (AP-42, Table 3.1-3, revised 4/00) by the annual amount of natural gas burned, in mmcf (summation of the monthly values from d)(5)h for the calendar year), and by the average heat content of natural gas (1020 mmBtu/mmcf), and then divide by 2000 lbs/ton.
- ii. When combusting number two fuel oil, multiply the emission factor of 0.00028 lb formaldehyde/MMBtu (AP-42, Table 3.1-4, revised 4/00) by the annual amount of number two fuel oil burned, in gallons (summation of the monthly values from d)(5)i for the calendar year), and by the average heat content of number two fuel oil (0.139 mmBtu/gallon), and then divide by 2000 lbs/ton.
- iii. Add f)(1)m.i + f)(1)m.ii.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

n. Emission Limitation

Visible PE shall not exceed 10% opacity, as a six-minute average, except for cold start-up and shutdown periods.



Applicable Compliance Method

Compliance shall be determined through visible emissions observations performed in accordance with the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1), and PTI 08-04888].

g) **Miscellaneous Requirements**

- (1) If continuous SO₂ and NO_x monitoring system is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan for the continuous NO_x and SO₂ monitoring systems required pursuant to 40 CFR Part 75, Appendix B must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888]

- (2) If a continuous monitoring system in compliance with 40 CFR 75.19 is used to determine compliance with the allowable emissions limitations above, the quality assurance/quality control plan required pursuant to 40 CFR Part 75.19(e)(5) must be made available during scheduled inspections and upon request by the Ohio EPA and/or Regional Air Pollution Control Agency.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 08-04888].